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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/718,153	RITZ ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	David Y. Jung	2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-35 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **CLAIMS PRESENTED**

Claims 1-35 are presented.

### **CLAIM REJECTIONS**

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arbaugh (cited by Applicant, WILLIAM A. ARBAUGH, et al., Automated Recovery in a Secure Bootstrap Process, August 1, 1997, pp. 1-17) and Acpi (cited by Applicant, Advanced Configuration and Power Interface Specification, Revision 2.0a, Compaq/Intel/Microsoft/Phoenix/Toshiba, March 31, 2002) and Allgeuer ("Why Bother

About BIOS Security?",

[http://www.sans.org/reading\\_room/whitepapers/threats/108.php](http://www.sans.org/reading_room/whitepapers/threats/108.php), year 2001).

Regarding claim 1, Acpi teaches "A [ ] component comprising:  
a communication component that receives a request for [ ] information  
from a [ ]; and, a retrieval component that retrieves [ ] information based, at least in part,  
upon the request, the retrieval component providing the [ ] information to the  
communication component, the communication component providing the [ ] information  
to the [ ] (page 27, alternating from Working and Sleeping states, i.e., the transition to  
Working state would require such communication and retrieval of information, at least  
during the arousal of the system to a Working state)."

These passages of Acpi do not teach "BIOS component" in the sense of the  
claim.

Allgeuer teaches "BIOS component (at all pages, but especially the section  
"Cracking BIOS Passwords" in which the hashing of the password is discussed)" for the  
motivation of proper booting (section "BIOS overview").

These passages of Acpi do not teach "cryptographic, decryption, encryption" in  
the sense of the claim.

Arbaugh teaches "cryptographic, decryption, encryption (section  
"INTRODUCTION", the third paragraph, in which the cryptographic key is discussed)"  
for the motivation of security (section "INTRODUCTION", the first three paragraphs).

Hence, it would have been obvious to those of ordinary skill in the art at the time  
of the claimed invention to combine the teachings of Acpi and the teachings of Allgeuer

Art Unit: 2134

and the teachings of Arbaugh for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Claims 1, 8, 29, 25, 32, 33, 34, 35 are the independent claims.

Regarding claim 8, Acpi teaches "A [ ] system comprising: a [ ] that facilitates a secure boot process of a computer system; an operating system loader that facilitates loading of an operating system for the computer system; and, a [ ] component that serves as an interface between the [ ] and the operating system loader, the [ ] component providing [ ] information to the [ ] in response to a request for [ ] information from the [ ] (page 27, alternating from Working and Sleeping states, i.e., the transition to Working state would require such communication and retrieval of information, at least during the arousal of the system to a Working state)."

These passages of Acpi do not teach "BIOS" or "BIOS component" in the sense of the claim.

Allgeuer teaches "BIOS component (at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed)" for the motivation of proper booting (section "BIOS overview").

These passages of Acpi do not teach "cryptographic, decryption" in the sense of the claim.

Arbaugh teaches "cryptographic, decryption (section "INTRODUCTION", the third paragraph, in which the cryptographic key is discussed)" for the motivation of security (section "INTRODUCTION", the first three paragraphs).

Art Unit: 2134

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Acpi and the teachings of Allgeuer and the teachings of Arbaugh for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Regarding claim 25, Acpi teaches "A method of securely restarting a computer system comprising: verifying a [ ]; retrieving [ ] information; employing the [ ] information to [ ] a hibernate file (page 27, alternating from Working and Sleeping states, i.e., the transition to Working state would require such communication and retrieval of information, at least during the arousal of the system to a Working state)."

These passages of Acpi do not teach "credential of a user" in the sense of the claim.

Allgeuer teaches "credential of a user (at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed)" for the motivation of proper booting (section "BIOS overview").

These passages of Acpi do not teach "decryption" in the sense of the claim.

Arbaugh teaches "decryption (section "INTRODUCTION", the third paragraph, in which the cryptographic key is discussed)" for the motivation of security (section "INTRODUCTION", the first three paragraphs).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Acpi and the teachings of Allgeuer and the teachings of Arbaugh for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Regarding claim 29, Acpi teaches "A method of securely using a computer system comprising: verifying a [ ]; retrieving [ ] information; employing the [ ] information to [ ] (page 27, alternating from Working and Sleeping states, i.e., the transition to Working state would require such communication and retrieval of information, at least during the arousal of the system to a Working state)."

These passages of Acpi do not teach "credential of a user" in the sense of the claim.

Allgeuer teaches "credential of a user (at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed)" for the motivation of proper booting (section "BIOS overview").

These passages of Acpi do not teach "decryption, securely access a device" in the sense of the claim.

Arbaugh teaches "decryption (section "INTRODUCTION", the third paragraph, in which the cryptographic key is discussed)" for the motivation of security (section "INTRODUCTION", the first three paragraphs).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Acpi and the teachings of Allgeuer and the teachings of Arbaugh for the motivation noted in the previous paragraphs so as to teach the claimed invention.  
to teach the claimed invention.

Regarding claim 32, Acpi teaches "A method of facilitating secure restarting of a computer system comprising: receiving a [ ] information ; and, securely storing the [ ]

Art Unit: 2134

information, the [ ] information to be employed by a [ ] during the restarting of the computer system from a hibernate mode (page 27, alternating from Working and Sleeping states, i.e., the transition to Working state would require such communication and retrieval of information, at least during the arousal of the system to a Working state)."

These passages of Acpi do not teach "BIOS component" in the sense of the claim.

Allgeuer teaches "BIOS component (at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed)" for the motivation of proper booting (section "BIOS overview").

These passages of Acpi do not teach "decryption" in the sense of the claim.

Arbaugh teaches "decryption (section "INTRODUCTION", the third paragraph, in which the cryptographic key is discussed)" for the motivation of security (section "INTRODUCTION", the first three paragraphs).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Acpi and the teachings of Allgeuer and the teachings of Arbaugh for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Regarding claim 33, Acpi teaches "A data packet transmitted between two or more computer components that facilitates secure restarting a computer system the data packet comprising: [ ] information to be employed by a [ ] to facilitate [ ] of a hibernate file, the [ ] information comprising at least one of a [ ] key, an [ ] key and a [ ]

algorithm (page 27, alternating from Working and Sleeping states, i.e., the transition to Working state would require such communication and retrieval of information, at least during the arousal of the system to a Working state)."

These passages of Acpi do not teach "BIOS component" in the sense of the claim.

Allgeuer teaches "BIOS component (at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed)" for the motivation of proper booting (section "BIOS overview").

These passages of Acpi do not teach "decryption" in the sense of the claim.

Arbaugh teaches "decryption (section "INTRODUCTION", the third paragraph, in which the cryptographic key is discussed)" for the motivation of security (section "INTRODUCTION", the first three paragraphs).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Acpi and the teachings of Allgeuer and the teachings of Arbaugh for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Regarding claim 34, Acpi teaches "A computer readable medium storing computer executable components of a cryptographic component comprising: a communication component that receives a request for [ ] information from a [ ]; and, a retrieval component that retrieves [ ] information based, at least in part, upon the request, the retrieval component providing the [ ] information to the communication component, the communication component providing the [ ] information to the [ ] (page

27, alternating from Working and Sleeping states, i.e., the transition to Working state would require such communication and retrieval of information, at least during the arousal of the system to a Working state)."

These passages of Acpi do not teach "BIOS component" in the sense of the claim.

Allgeuer teaches "BIOS component (at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed)" for the motivation of proper booting (section "BIOS overview").

These passages of Acpi do not teach "cryptographic, decryption" in the sense of the claim.

Arbaugh teaches "cryptographic, decryption (section "INTRODUCTION", the third paragraph, in which the cryptographic key is discussed)" for the motivation of security (section "INTRODUCTION", the first three paragraphs).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Acpi and the teachings of Allgeuer and the teachings of Arbaugh for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Regarding claim 35, Acpi teaches "A [ ] component comprising: means for receiving a request for [ ] information from a [ ]; means for retrieving [ ] information based, at least in part, upon the request; and, means for providing the [ ] information to the [ ] (page 27, alternating from Working and Sleeping states, i.e., the transition to

Working state would require such communication and retrieval of information, at least during the arousal of the system to a Working state)."

These passages of Acpi do not teach "BIOS component" in the sense of the claim.

Allgeuer teaches "BIOS component (at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed)" for the motivation of proper booting (section "BIOS overview").

These passages of Acpi do not teach "cryptographic, decryption" in the sense of the claim.

Arbaugh teaches "cryptographic, decryption (section "INTRODUCTION", the third paragraph, in which the cryptographic key is discussed)" for the motivation of security (section "INTRODUCTION", the first three paragraphs).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Acpi and the teachings of Allgeuer and the teachings of Arbaugh for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Claims 2-7, 9-24, 26-28, 30-31 are the dependent claims.

Claims 2, 15-23, 27, 30 (key, etc.): see Arbaugh, section "INTRODUCTION", the third paragraph, in which the cryptographic key is discussed.

Claims 3, 6, 7, 28, 31 (storage, etc.): see Allgeuer at all pages, but especially the section "BIOS overview" in which storage, memory, disk, etc. are discussed.

Art Unit: 2134

Claims 4, 10 (boot, etc.): see Allgeuer at all pages, but especially the section "BIOS overview" in which booting is discussed.

Claims 5, 9 (.hibernate, etc.): see Acpi, page 27 (alternating from Working and Sleeping states, i.e., the transition to Working state would require such communication and retrieval of information, at least during the arousal of the system to a Working state).

Claims 24, 26 (password, etc.): see Allgeuer at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed.

Claims 11-14 (various encryptions): such cryptographic algorithms were well known in the art for the motivation of security. See also Arbaugh, section "INTRODUCTION", the third paragraph, in which the cryptographic key is discussed. See also Allgeuer at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed.

In general, for claims 2-7, 9-24, 26-28, 30-31, see Allgeuer at all pages, but especially the section "Cracking BIOS Passwords" in which the hashing of the password is discussed.

### ***Conclusion***

The art made of record and not relied upon is considered pertinent to applicant's disclosure. The art disclosed general background.

### ***Points of Contact***

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(571) 273-8300, (for formal communications intended for entry)

**Or:**

(571) 273-3836 (for informal or draft communications, please label "PROPOSED" or  
"DRAFT")

Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to David Jung whose telephone number is (571) 272-3836  
or Kambiz Zand whose telephone number is (272) 272-3811.

Art Unit: 2134

David Jung

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Patent Examiner

6/15/07